REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-2, 9, 10, 14-16, and 19 are currently pending. Claims 3-4 are canceled without prejudice or disclaimer of subject matter. Claims 5-8, 11-13, 17, 18 and 20-38 were previously canceled without prejudice or disclaimer of subject matter. Claims 1, 14-16, and 19, which are independent, are amended. Support of this amendment is provided throughout the Specification.

No new matter has been introduced. Changes to the claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

II. REJECTIONS UNDER 35 U.S.C. §102(b) and §103(a)

Claims 1-4, 9, 14-16 and 19 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Japanese Patent No. 04-313949 to Yoneyama et al. (hereinafter, merely "Yoneyama").

Claim 10 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Yoneyama in view of U.S. Patent No. 5,517,242 to Yamada et al. (hereinafter, merely "Yamada").

III. RESPONSE TO REJECTIONS

Claim 1 recites, *inter alia*:

"...**a controller configured to control, in pixel units, exposure time with respect to the light receiving surface on the basis of the evaluation by the evaluator**;

a storage unit configured to store plural pixel values output from the image pick-up unit and the exposure times of pixels corresponding to the plural pixel values, the plural pixel values included in a frame or a field, and **an exposure time of a particular pixel may be different than an exposure time of another pixel**; and

a correcting unit configured to correct the plural pixel values stored in the storage unit **based on the exposure times stored in the storage unit**,

wherein the controller is operative so that when the pixel value is a first predetermined value or more, the controller shortens the exposure time with respect to the pixel of the light receiving surface corresponding to that pixel value, and

wherein the controller is operative so that when the pixel value is less than a second predetermined value, the controller elongates the exposure time with respect to the pixel of the light receiving surface corresponding to that pixel value." (Emphasis added)

As understood by Applicants, Yoneyama relates to an apparatus and a method for increasing dynamic range of an image pickup device. After the exposure time of the image pickup device is preset, read-out values of each pixel of the image pickup device are obtained for a specific number of times and compared with a standard value. When the read-out value is higher than the standard value, an output value of the image pick-up device is extrapolated by using the count of the specific read-out times, a preset total number of read-out times of the exposure time, and the read-out value.

This invention is generally directed to an image pick-up apparatus and method that is able to obtain picture image of object of high contrast without losing its detail. Exposure time of each pixel or plural pixels of the image pick-up device is controlled by a controller based

on an evaluation result between the pixel value and a first predetermined value and a second predetermined value.

First, Applicants respectfully submit that Yoneyama's apparatus read values of each pixel for a specific number of times and stores only the values and the count of read-out times and compares the values with only one standard value. Based on the comparison, Yoneyama's apparatus extrapolates the output value. Yoneyama's count of read out times and a preset total number of read out times during exposure time are used to extrapolate the output value and are not used to control exposure time. Applicants respectfully submit that nothing in Yoneyama teaches or discloses changing exposure time of each pixel based on the comparison results between the read out value and the standard value. In contrast, Applicants' invention does not read each pixel for a specific number of time and stores exposure time. Applicants' invention further controls exposure time based on the evaluation result between the pixel value and a first predetermined value and a second predetermined value.

Furthermore, Applicants respectfully submit nothing in Yoneyama teaches or discloses an exposure time of a particular pixel may be different than an exposure time of another pixel and wherein the controller is operative so that when the pixel value is a first predetermined value or more, the controller shortens the exposure time with respect to the pixel of the light receiving surface corresponding to that pixel value and wherein the controller is operative so that when the pixel value is less than a second predetermined value, the controller elongates the exposure time with respect to the pixel of the light receiving surface corresponding to that pixel value, as recited in claim 1 (emphasis added).

Therefore, Applicant submits that claim 1 is patentable.

For at least similar, or somewhat similar, reasons discussed above regarding claim 1, claims 14-16 and 19 are also patentable.

IV. DEPENDENT CLAIMS

The other claims in this application are each dependent on one of the independent claims discussed above, and are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

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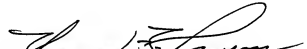
By 
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